

**CITY OF TEMPE AMENDMENTS TO THE
2009 INTERNATIONAL MECHANICAL CODE
ARTICLE V, SECTION 8-500 OF THE
TEMPE CITY CODE**

Sec. 202 GENERAL DEFINITIONS.

Smoke Detector. An approved listed and labeled device that senses visible or invisible particles of combustion.

Sec. 303 EQUIPMENT AND APPLIANCE LOCATION.

Section 303.3 Prohibited locations. Fuel-fired appliances shall not be located in, or obtain combustion air from, any of the following rooms or spaces:

1. Sleeping rooms.
2. Bathrooms.
3. Toilet rooms.
4. Storage closets.
5. Surgical rooms.
6. Any room operating under negative pressure unless the appliances are listed for that use.

Exceptions: This section shall not apply to the following appliances:

1. Direct-vent appliances that obtain all combustion air directly from the outdoors.
2. Solid fuel-fired appliances provided that the room is not a confined space and the building is not of unusually tight construction.
3. Appliances installed in a dedicated enclosure in which all combustion air is taken directly from the outdoors, in accordance with ~~section 703~~ Chapter 7. Access to such enclosure shall be through a solid door, weather-stripped in accordance with the exterior door air leakage requirements of the International Energy Conservation Code and equipped with an approved self-closing device.

Section 303.7 Pit locations. Appliances installed in pits or excavations shall not come in contact with the surrounding soil. The sides of the pit or excavation shall be held back a minimum of 12 inches (305 mm) from the appliance. Where the depth exceeds 12 inches (305 mm) below adjoining grade, the walls of the pit or excavation shall be lined with concrete or masonry. Such concrete or masonry shall extend a minimum of 4 inches (102 mm) above to adjacent grade and shall have sufficient lateral load-bearing capacity to resist collapse. The appliance shall be protected from flooding in an approved manner. Liquefied petroleum (LPG) appliances shall not be installed in a pit, attic or other location that would cause a ponding or retention of gas.

Sec. 304. INSTALLATION.

Section 304.3 Elevation of ignition source. Equipment and appliances having an ignition source and located in hazardous locations and public garages, private garages, repair garages, automotive motor fuel-dispensing facilities and parking garages shall be elevated such that the source of ignition is not less than 18 inches (457 mm) above the floor surface on which the equipment or appliance rests. For the purpose of this section, rooms or spaces that are not part of the living space of a dwelling unit and that communicate directly with a private garage through openings shall be considered to be part of the private garage.

Exceptions:

1. Elevation of the ignition source is not required for appliances that are listed as flammable vapor resistant and for installation without elevation.
2. Direct-vent appliances that obtain all combustion air directly from the outdoors.
3. Clothes dryers installed in private garages.

Section 304.9 Clearances from grade. Equipment and appliances installed at grade level shall be supported on a level concrete slab or other approved material extending a minimum of 3 inches (76 mm) above finished grade or shall be suspended a minimum of 6 inches (152 mm) above finished grade. Such support shall be in accordance with the manufacturer's installation instructions.

Sec. 401 GENERAL.

Section 401.4.1. Intake openings. Air intake openings shall comply with all of the following:

1. Intake openings shall be located a minimum of 10 feet (3048 mm) from lot lines or buildings on the same lot. Where openings front on a street or public way, the distance shall be measured to the centerline of the street or public way.
2. Mechanical and gravity outdoor air intake openings shall be located not less than 10 feet (3048 mm) horizontally from any hazardous or noxious contaminant source, such as vents, streets, alleys, parking lots and loading docks, except as specified in Item 3 or Section 501.2.1.
3. Intake openings shall be located not less than 3 feet (914 mm) below contaminant sources where such sources are located within 10 feet (3048 mm) of the opening.
4. Intake openings on structures in flood hazard areas shall be at or above the design flood level.
5. All outside air intake openings shall be located on secure roofs or other secure locations as approved by the code official.

The exhaust from a bathroom or kitchen in a residential dwelling shall not be considered to be a hazardous or noxious contaminant.

Sec. 506 COMMERCIAL KITCHEN HOOD VENTILATION SYSTEM DUCTS AND EXHAUST EQUIPMENT.

Section 506.3.10.4 Non-fire-resistance-rated roof/ceiling assembly penetration. A duct enclosure for a grease duct that penetrates only a non-fire-resistant-rated roof/ceiling assembly and only passes through the attic space may have the total thickness of the required fire-resistive material installed on the duct side of the duct enclosure.

Sec. 606 SMOKE DETECTION SYSTEMS CONTROL.

Section 606.2 Where required. Smoke detectors shall be installed where indicated in Sections 606.2.1 through 606.2.3.

Exceptions:

1. Smoke detectors shall not be required where air distribution systems are incapable of spreading smoke beyond the enclosing walls, floors and ceilings of the room or space in which the smoke is generated.
2. Evaporative coolers which supply 100% outside air.

Section 606.2.1 Return air systems. Smoke detectors shall be installed in air distribution systems with a design capacity greater than 2,000 cfm (0.9 m³/s) in the return air ducts or plenum upstream of any filters, exhaust air connections, outdoor air connections, or decontamination equipment and appliances or in the main supply air duct or plenum served by such air distribution system.

Exception: Smoke detectors are not required in the main supply air or return air system where all portions of the building served by the air distribution system are protected by area smoke detectors connected to a fire alarm system in accordance with the *International Fire Code*. The area smoke detector system shall comply with Section 606.4.

Section 606.2.2 Common supply and return air systems. Where multiple air-handling systems share a common supply air or return air ducts or plenums with a combined design capacity greater than 2,000 cfm (0.9 m³/s), the supply air or the return air system shall be provided with smoke detectors in accordance with Section 606.2.1.

Section 606.2.3 Supply air or return air risers. Where supply air or return air risers serve two or more stories and serve any portion of a supply air or return air system having a design capacity greater than 15,000 cfm (7.1 m³/s), smoke detectors shall be installed at each story. Such smoke detectors shall be located upstream of the connection between the supply air or return air riser and any air ducts or plenums.

Sec. 902 MASONRY FIREPLACES.

Section 902.1 General. Masonry fireplaces shall be constructed in accordance with the International Building Code and comply with Section 928 of this code.

Sec. 903 FACTORY-BUILT FIREPLACES.

Section 903.1 General. Factory-built fireplaces shall be listed and labeled and shall be installed in accordance with the conditions of the listing and comply with Section 928. Factory-built fireplaces shall be tested in accordance with UL 127.

Sec. 904. PELLET FUEL-BURNING APPLIANCES.

Section 904.1 General. Pellet fuel-burning appliances shall be listed and labeled in accordance with ASTM E 1509 and shall be installed in accordance with the terms of the listing and comply with Section 928.

Sec. 905 FIREPLACE STOVES AND ROOM HEATERS.

Section 905.1 General. Fireplace stoves and solid-fuel-type room heaters shall be listed and labeled and shall be installed in accordance with the conditions of the listing and comply with Section 928. Fireplace stoves shall be tested in accordance with UL 737. Solid-fuel-type room heaters shall be tested in accordance with UL1482. Fireplace inserts intended for installation in fireplaces shall be listed and labeled in accordance with the requirements of UL1482 and shall be installed in accordance with the manufacturer's installation instructions and comply with Section 928.

Sec. 928 SOLID FUEL-BURNING EQUIPMENT OR FIREPLACE RESTRICTIONS.

Section 928.1 Definitions. For the purposes of this section, the following words and terms shall have the meaning ascribed thereto:

FIREPLACE: Means a built-in-place masonry hearth and fire chamber or a factory built appliance, designed to burn solid fuel or to accommodate gas or electric log insert or similar device, and which is intended for occasional recreational or aesthetic use, not for cooking, heating, or industrial processes.

SOLID FUEL: Means and includes, but is not limited to, wood, coal, or other nongaseous or non-liquid fuels, including those fuels defined by the Maricopa County Air Pollution Control Officer as "inappropriate fuel" to burn in residential wood burning devices.

WOOD STOVE: Means a solid-fuel-burning heating appliance including a pellet stove, which is either freestanding or designed to be inserted into a fireplace.

Section 928.2 General. On or after December 31, 1998, no person, firm, or corporation shall construct or install a fireplace or a woodstove, and the city shall not approve or issue a permit to construct or install a fireplace or a woodstove, unless the fireplace or woodstove complies with one of the following:

1. A fireplace which has permanently installed gas or electric log insert;
2. A fireplace, woodstove, or other solid-fuel-burning appliance which has been certified by the United States Environmental Protection Agency as conforming to 40 Code of Federal Regulations Part 60, Subpart AAA;

3. A fireplace, woodstove, or other solid-fuel-burning appliance that has been tested and listed by a nationally recognized testing agency to meet performance standards equivalent to those adopted by 40 Code of Federal Regulations Part 60, Subpart AAA;
4. A fireplace, woodstove, or other solid-fuel-burning appliance that has been determined by the Maricopa County Air Pollution Control Officer to meet performance standards equivalent to those adopted by 40 Code of Federal Regulations Part 60, Subpart AAA; or
5. A fireplace that has a permanently installed woodstove insert that complies with paragraphs 2, 3, or 4 above.

Exceptions: The following installations are not regulated and are not prohibited by this section:

1. Furnaces, boilers, incinerators, kilns, and other similar space heating or industrial process equipment;
2. Cook stoves, barbecue grills, and similar appliances designed primarily for cooking; and
3. Fire pits, barbecue grills, and other outdoor fireplaces.

Fireplaces constructed or installed on or after December 31, 1998, that contain a gas or electric log insert or a woodstove insert, shall not be altered to directly burn wood or any other solid fuel. On or after December 31, 1998, no person, firm, or corporation shall alter a fireplace, woodstove, or other solid-fuel-burning appliance in any manner that would void its certification or operational compliance with the provisions of this section.

Fireplaces constructed or installed on or after December 31, 1998, shall not be altered without first obtaining a permit from the city to insure compliance with this section.